

REMARKS

Although the Examiner indicated the drawings were accepted, this amendment revises the specification and drawings to comply with the objections from the draftsperson dated March 3, 2000. A Petition for the Acceptance of Color Drawings was previously submitted in conjunction with an amendment filed April 18, 2003. A copy of the Petition is submitted herewith for the convenience of the Office. A decision on the petition is requested.

This amendment is submitted prior to or concurrently with the payment of the issue fee and complies with the provisions of 37 C.F.R. § 1.312, therefore, no petition or fee is required. No new matter has been added. Entry of the amendment and the revised drawing figures is requested.

Respectfully submitted,



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Date: February 23, 2004  
AFN

Enclosures: Replacement Sheets  
Annotated Sheets Showing Changes  
Courtesy copy of Petition to Accept Color Drawings

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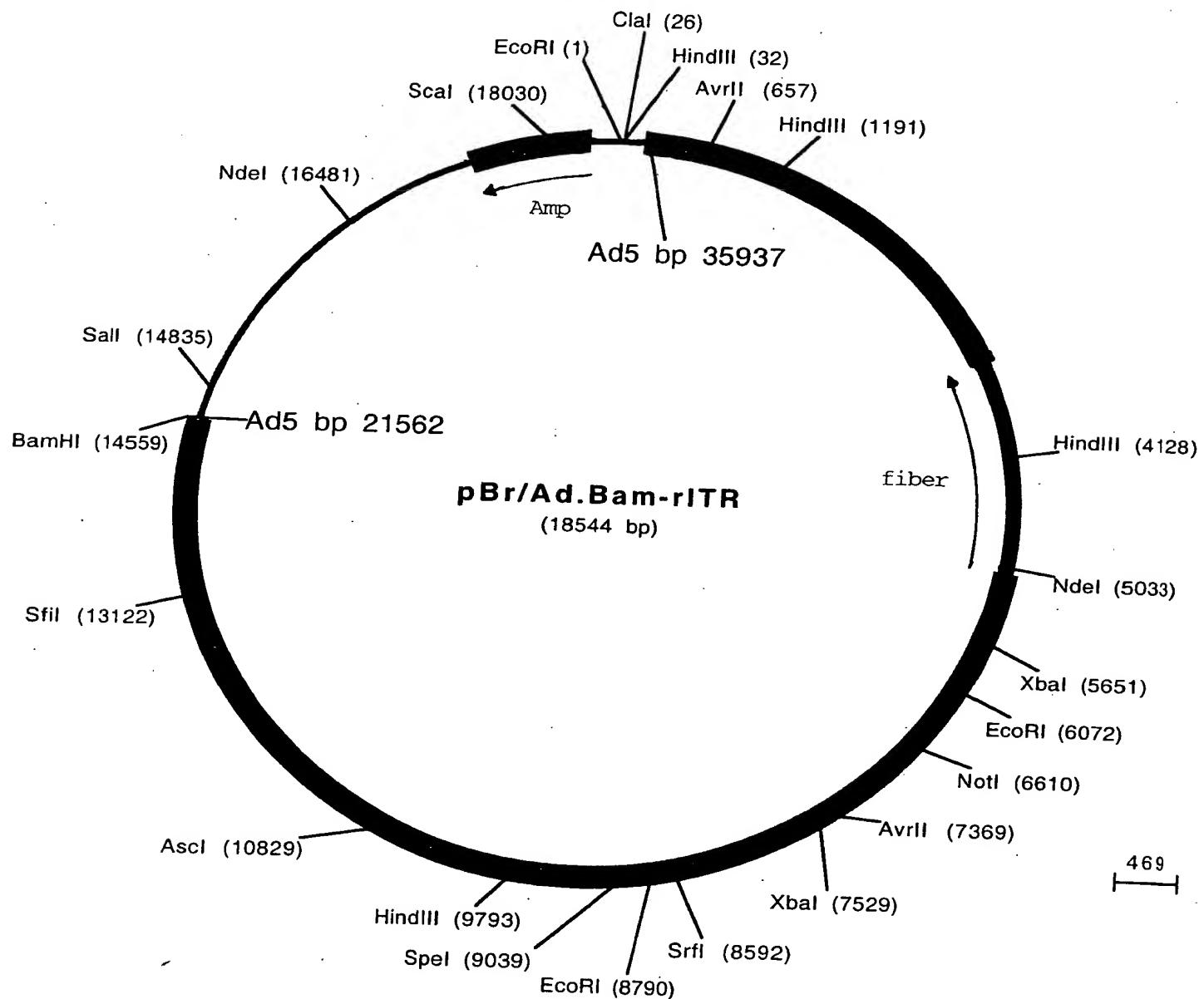
TITLE: MEANS AND METHODS FOR FIBROBLAST-LIKE OR MACROPHAGE-LIKE CELL TRANSDUCTION

Inventor: Vogels et al.

Serial No.: 09/517,898 Docket No.: 2578-3982.2US

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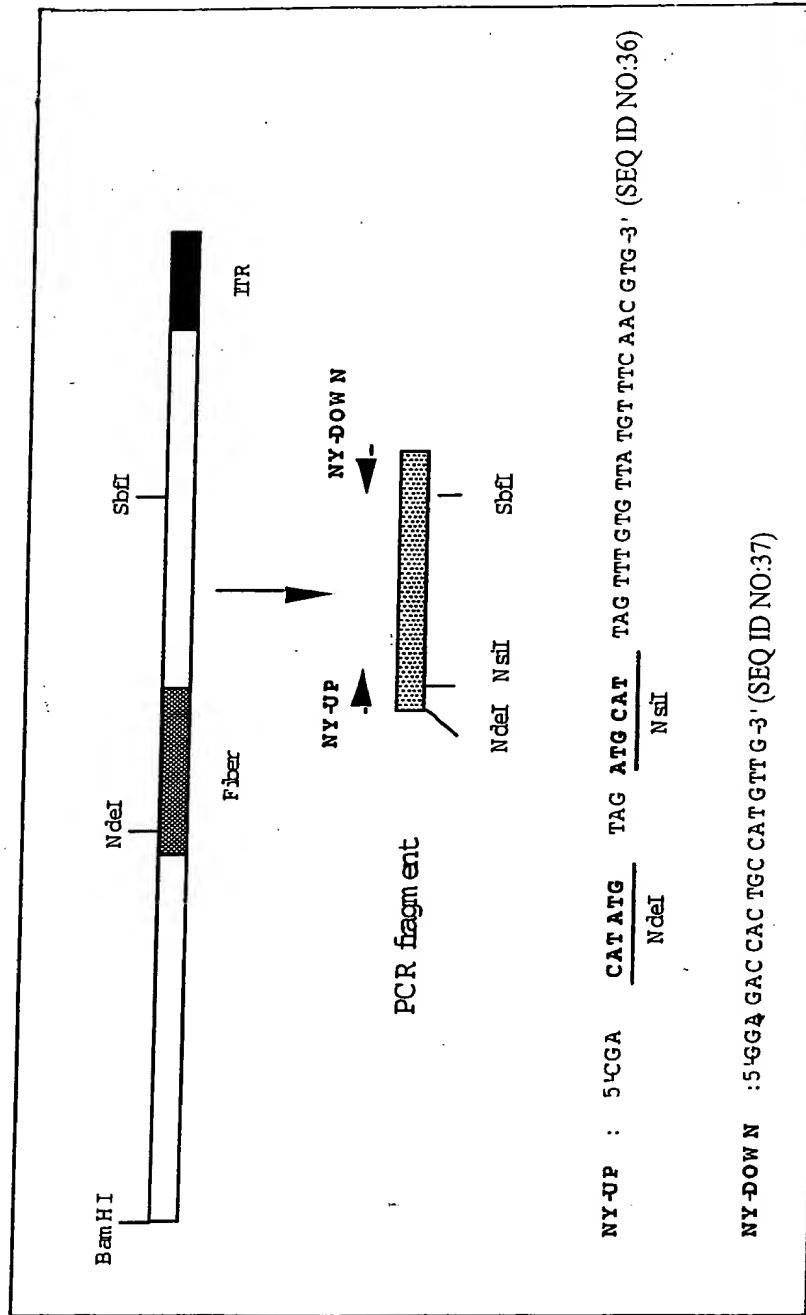
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Figure 2



remove border line



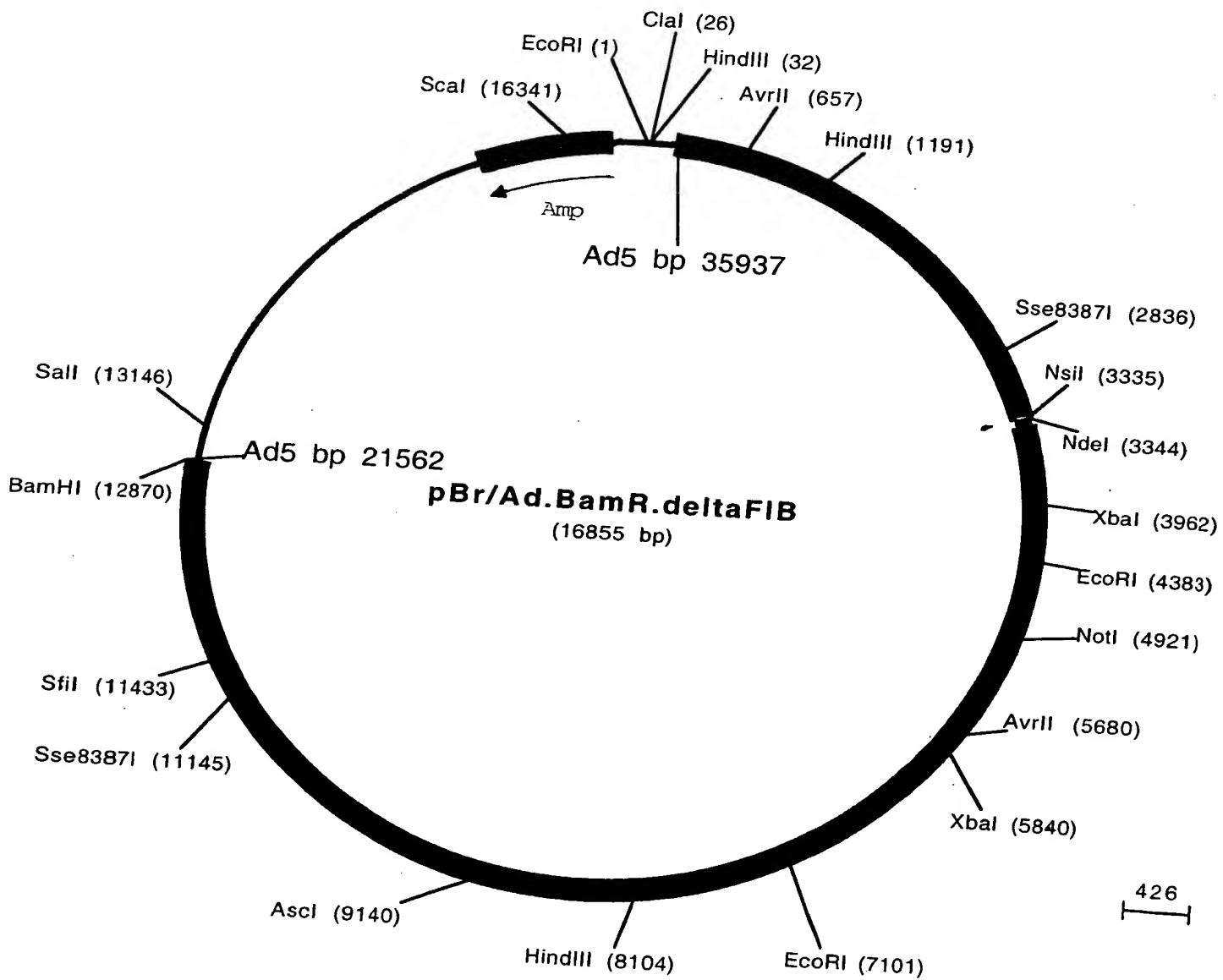
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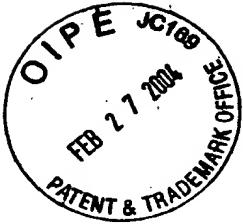


Figure 4: Sequence of Ad5/fib16 chimeric fiber

**ATGAAGCGCGCAAGACCGTCTGAAGATACTTCAACCCGTATCCATATGAAGATGAAAGCAGCT**  
CACAAACACCCCTTATAAACCTGGTTCATTCCTCAAATGGTTTGCACAAAGCCCAGATGGAGT  
TCTAACTCTAAATGTGTTAATCCACTCACTACCGCCAGCGGACCCCTCCAACCTAAAGTTGGAAGC  
AGTCTTACAGTAGATACTATCGATGGGTCTTGGAGGAAAATAACTGCCAAGGCCACTCACTA  
AAACTAACCACTCCATAGGTTATTAAATAGGATCTGGCTTGCAAACAAAGGATGATAAACTTGT  
ATCGCTGGGAGATGGGTTGGTAACAAAGGATGATAAACTATGTTATCGCTGGGAGATGGGTTAATA  
ACAAAAAAATGATGTACTATGTGCCAAACTAGGACATGGCCTGTGTTGACTCTTCCAATGCTATCA  
CCATAGAAAACAACACCTTGTGGACAGGCGCAAACCAAGCGCCAATGTGTAATTAAAGAGGGAGA  
AGATTCCCCAGACTGTAAGCTCACTTAGTTAGTGAAGAATGGAGGACTGATAAAATGGATACATA  
ACATTAATGGGAGCCTCAGAATATACTAACACCTTGTGTTAAAAACAAATCAAGTACAATCGATGTA  
ACCTCGCATTGATAATACTGGCCAAATTATTACTTACCTATCATCCCTTAAAGTAACCTGAACCT  
TAAAGACAACCAAAACATGGCTACTGGAACCATAACCAGTGCCAAAGGCTCATGCCAGCACC  
GCCTATCCATTATAACATACGCCACTGAGACCCTAAATGAAGATTACATTATGGAGAGTGTACT  
ACAAATCTACCAATGGAACTCTTCCACTAAAAGTTACTGTCACACTAAACAGACGTATGTTAGC  
TTCTGGAATGGCCTATGCTATGAATTTCATGGCTCTAAATGCAGAGGAAGCCCCGGAAACTACC  
GAAGTCACTCTCATTACCTCCCCCTTCTTTCTTATCAGAGAAGATGACTGAATGCATTAG

(SEQ ID NO:32)

remove figure legend  
rotate



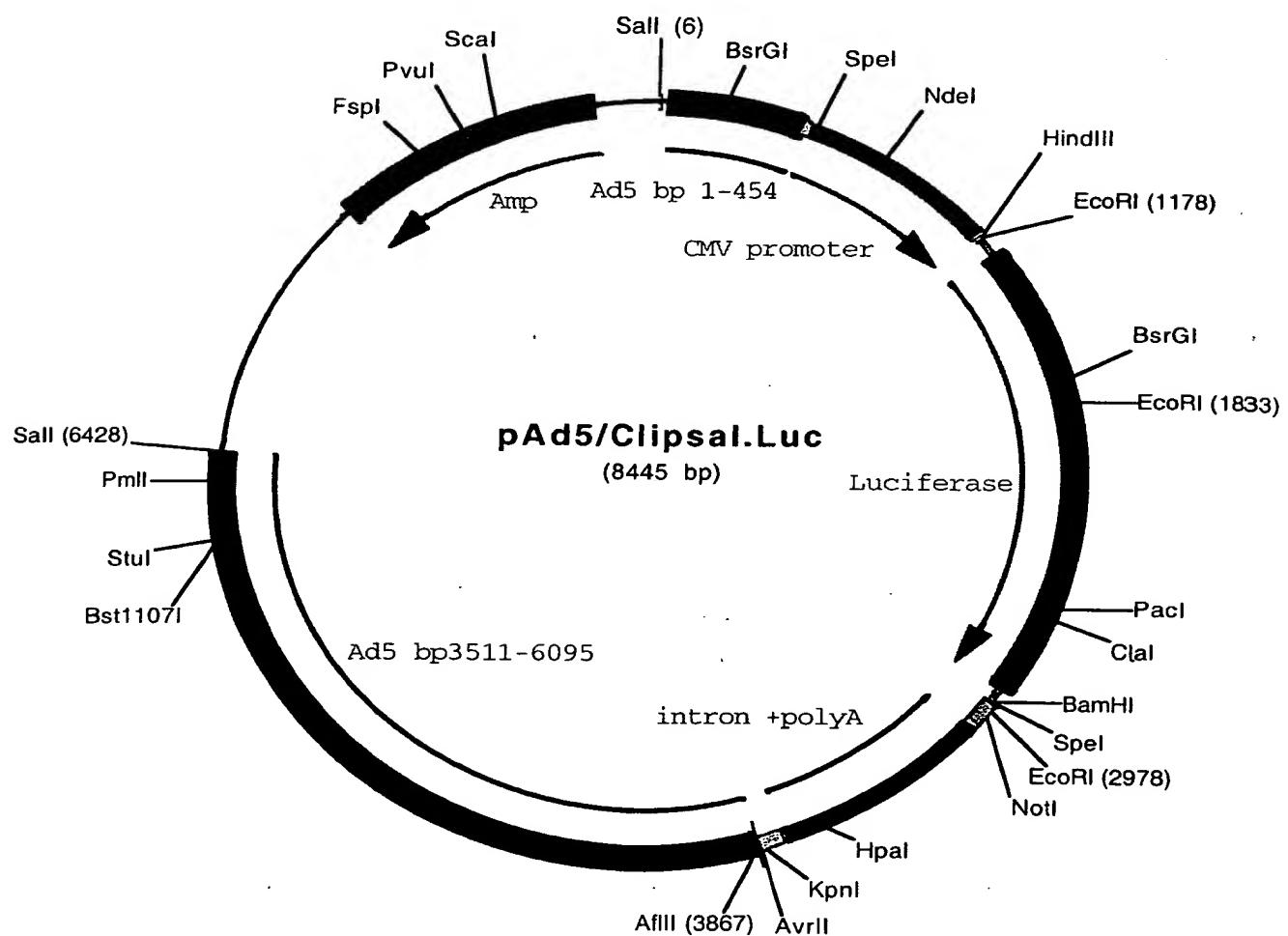
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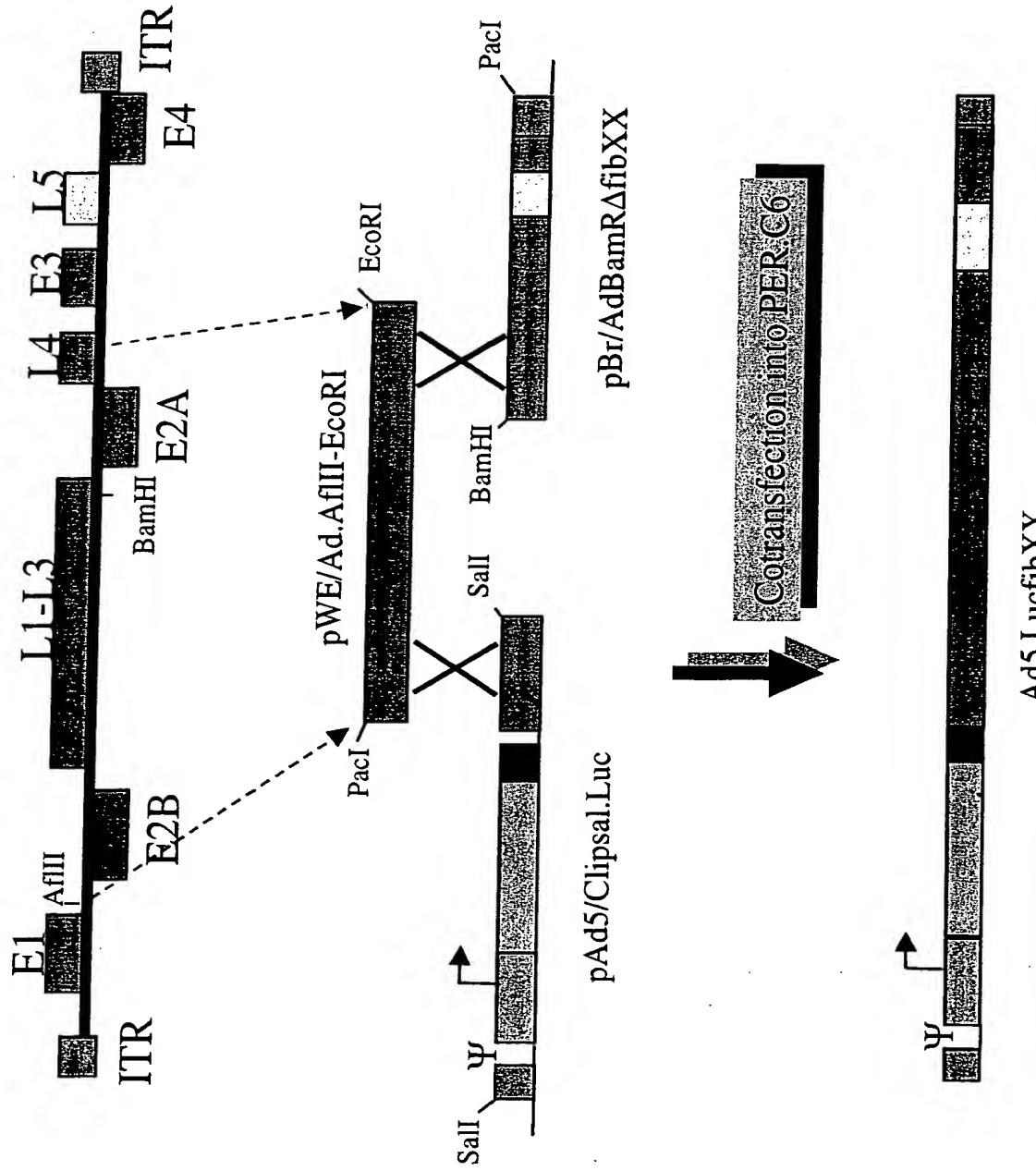
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**Figure 6. Generation of Chimeric Adenoviruses**



① remove heading  
→ entered "Figure 6"



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FIGURE 7A

Alignment Report of alignment.DNA, using Clustal method with Weighted residue weight table.  
Wednesday, March 31, 1999 16:13

Page 1

1 AT GGC - CAAACGAGCTCGGCTAACGAGCTCCTTCAATCCGGTC T A C C C C T Fiber 16 Genbank (SEQ ID NO  
1 AT GAAGCGCGCAAGACCGTCTGAA-GATAACCTTCAA[C][C][C]GT[G]TA[T]CC[A]T Ad5/16 Fiber DNA (SEQ ID NO  
50 AT GAAGATGAAAGCAGCTCACAAACACCCCTTTATAAAACCTGGTTTCATT Fiber 16 Genbank  
50 AT GAAGATGAAAGCAGCTCACAAACACCCCTTTATAAAACCTGGTTTCATT Ad5/16 Fiber DNA  
38  
100 TCCTCAAATGGTTTGCACAAAGCCCAGATGGAGTTCTAACTCTTAAAATG Fiber 16 Genbank  
100 TCCTCAAATGGTTTGCACAAAGCCCAGATGGAGTTCTAACTCTTAAAATG Ad5/16 Fiber DNA  
150 TGTTAATCCACTCACTACCGGCCAGCGGACCCCTCCAACCTAAAGTTGGAA Fiber 16 Genbank  
150 TGTTAATCCACTCACTACCGGCCAGCGGACCCCTCCAACCTAAAGTTGGAA Ad5/16 Fiber DNA  
200 GCAGTCTTACAGTAGATACTATCGATGGGTCTTGGAGGAAAAATATAAC T Fiber 16 Genbank  
200 GCAGTCTTACAGTAGATACTATCGATGGGTCTTGGAGGAAAAATATAAC T Ad5/16 Fiber DNA  
250 GCCGCCAGCGCCACTCACTAAACCTAACCACTCCATAGGTTATTAATAGG Fiber 16 Genbank  
250 GCCG[A]AGCGCCACTCACTAAACCTAACCACTCCATAGGTTATTAATAGG Ad5/16 Fiber DNA  
300 ATCTGGCTTGCAAAACAAAGGATGATAAAACTTTGTTATCGCTGGGAGATG Fiber 16 Genbank  
300 ATCTGGCTTGCAAAACAAAGGATGATAAAACTTTGTTATCGCTGGGAGATG Ad5/16 Fiber DNA  
350 GGTTGGTAACAAAGGATGATAAAACTATGTTATCGCTGGGAGATGGTTA Fiber 16 Genbank  
350 GGTTGGTAACAAAGGATGATAAAACTATGTTATCGCTGGGAGATGGTTA Ad5/16 Fiber DNA  
400 ATAACAAAAAATGATGTACTATGTCGCAAACCTAGGACATGGCCTTGTGTT Fiber 16 Genbank  
400 ATAACAAAAAATGATGTACTATGTCGCAAACCTAGGACATGGCCTTGTGTT Ad5/16 Fiber DNA  
450 TGACTCTCCAATGCTATCACCATAGAAAACAACACCTTGTGGACAGGGG Fiber 16 Genbank  
450 TGACTCTCCAATGCTATCACCATAGAAAACAACACCTTGTGGACAGGGG Ad5/16 Fiber DNA  
500 CAAACCAAGCGCCACTGTGTAATTAAAGAGGGAGAAAGATTCCCCAGAC Fiber 16 Genbank  
500 CAAACCAAGCGCCACTGTGTAATTAAAGAGGGAGAAAGATTCCCCAGAC Ad5/16 Fiber DNA  
550 TGTAAGCTCACTTTAGTTCTAGTGAAAGAAATGGAGGACTGATAAAATGGATA Fiber 16 Genbank  
550 TGTAAGCTCACTTTAGTTCTAGTGAAAGAAATGGAGGACTGATAAAATGGATA Ad5/16 Fiber DNA  
600 CATAACATTAATGGGAGCCCTCAGAATATACTAACACCTTGTTTAAAAACAA Fiber 16 Genbank  
600 CATAACATTAATGGGAGCCCTCAGAATATACTAACACCTTGTGTTAAAAACAA Ad5/16 Fiber DNA  
Fig 7B  
650 ATCAAGTTACAATCGATGTAACCTCGCATTGATAATACTGGCCTTAAAT T Fiber 16 Genbank  
650 ATCAAGTTACAATCGATGTAACCTCGCATTGATAATACTGGCCTTAAAT T Ad5/16 Fiber DNA  
700 ATTACTTACCTATCATCCCCTTAAAGTAACCTGAACCTTTAAAGACAAACCA Fiber 16 Genbank  
700 ATTACTTACCTATCATCCCCTTAAAGTAACCTGAACCTTTAAAGACAAACCA Ad5/16 Fiber DNA  
750 AACATGGCTACTGGAACCATAACCACTGGCCAAAGGGCTTCATGCCAGCA Fiber 16 Genbank  
750 AACATGGCTACTGGAACCATAACCACTGGCCAAAGGGCTTCATGCCAGCA Ad5/16 Fiber DNA  
800 CCACCGCCTATCCATTAAACATAACGCCACTGAGACCCCTAAATGAAGAT Fiber 16 Genbank  
800 CCACCGCCTATCCATTAAACATAACGCCACTGAGACCCCTAAATGAAGAT Ad5/16 Fiber DNA  
850 TACATTTATGGAGAGTGTACTACAAATCTACCAATGGAACTCTCTTTCC Fiber 16 Genbank  
850 TACATTTATGGAGAGTGTACTACAAATCTACCAATGGAACTCTCTTTCC Ad5/16 Fiber DNA  
900 ACTAAAAGTTACTGTCACACTAAACAGACGTATGTTAGCTCTGGAAATGG Fiber 16 Genbank  
900 ACTAAAAGTTACTGTCACACTAAACAGACGTATGTTAGCTCTGGAAATGG Ad5/16 Fiber DNA  
950 CCTATGCTATGAATTTCATGGTCTCTAAATGCAGAGGAAGCCCCGGAA Fiber 16 Genbank  
950 CCTATGCTATGAATTTCATGGTCTCTAAATGCAGAGGAAGCCCCGGAA Ad5/16 Fiber DNA  
1000 ACTACCGAAGTCACTCTCATTACCTCCCCCTTCTTTTCTTATATCAG Fiber 16 Genbank  
1000 ACTACCGAAGTCACTCTCATTACCTCCCCCTTCTTTTCTTATATCAG Ad5/16 Fiber DNA  
1050 AGAAGATGACTGA Fiber 16 Genbank  
1050 AGAAGATGACTGAATGCATTAGTTGTATGTTCAACGTGTTATT Ad5/16 Fiber DNA  
1100 TCAATTG Fiber 16 Genbank  
1100 TCAATTG Ad5/16 Fiber DNA

Decoration 'Decoration #1': Box residues that differ from Fiber 16 Genbank.



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FIGURE 2B-7C

Alignment Report of alignment.prot, using Clustal method with PAM250 residue weight table.

Wednesday, March 31, 1999 16:19

Page

1	M A K R A R L S S - S F N P V Y P Y E D E S S S Q H P F I N	genbank Fiber 16 (SEQ ID NO:35)
1	M - K R A R P S E D T F N P V Y P Y E D E S S S Q H P F I N	chimeric Ad5/Fib16 (SEQ ID NO:34)
30	P G F I S S N G F A Q S P D G V L T L K C V N P L T T A S G	genbank Fiber 16
30	P G F I S S N G F A Q S P D G V L T L K C V N P L T T A S G	chimeric Ad5/Fib16
60	P L Q L K V G S S L T V D T I D G S L E E N I T A A A P L T	genbank Fiber 16
60	P L Q L K V G S S L T V D T I D G S L E E N I T A A A P L T	chimeric Ad5/Fib16
90	K T N H S I G L L I G S G L Q T K D D K L C L S L G D G L V	genbank Fiber 16
90	K T N H S I G L L I G S G L Q T K D D K L C L S L E D G L V	chimeric Ad5/Fib16
120	T K D D K L C L S L G D G L I T K N D V L C A K L G H G L V	genbank Fiber 16
120	T K D D K L C L S L G D G L I T K N D V L C A K L G H G L V	chimeric Ad5/Fib16
150	F D S S N A I T I E N N T L W T G A K P S A N C V I K E G E	genbank Fiber 16
150	F D S S N A I T I E N N T L W T G A K P S A N C V I K E G E	chimeric Ad5/Fib16
180	D S P D C K L T L V L V K N G G L I N G Y I T L M G A S E Y	genbank Fiber 16
180	D S P D C K L T L V L V K N G G L I N G Y I T L M G A S E Y	chimeric Ad5/Fib16
210	T N T L F K N N Q V T I D V N L A F D N T G Q I I T Y L S S	genbank Fiber 16
210	T N T L F K N N Q V T I D V N L A F D N T G Q I I T Y L S S	chimeric Ad5/Fib16
240	L K S N L N F K D N Q N M A T G T I T S A K G F M P S T T A	genbank Fiber 16
240	L K S N L N F K D N Q N M A T G T I T S A K G F M P S T T A	chimeric Ad5/Fib16
270	Y P F I T Y A T E T L N E D Y I Y G E C Y Y K S T N G T L F	genbank Fiber 16
270	Y P F I T Y A T E T L N E D Y I Y G E C Y Y K S T N G T L F	chimeric Ad5/Fib16
300	P L K V T V T L N R R M L A S G M A Y A M N F S W S L N A E	genbank Fiber 16
300	P L K V T V T L N R R M L A S G M A Y A M N F S W S L N A E	chimeric Ad5/Fib16
330	E A P E T T E V T L I T S P F F F S Y I R E D D	genbank Fiber 16
330	E A P E T T E V T L I T S P F F F S Y I R E D D	chimeric Ad5/Fib16

Decoration 'Decoration #1': Box residues that differ from genbank Fiber 16 .

Rotate to fit template

Amend to be Fig 7C

Remove page number



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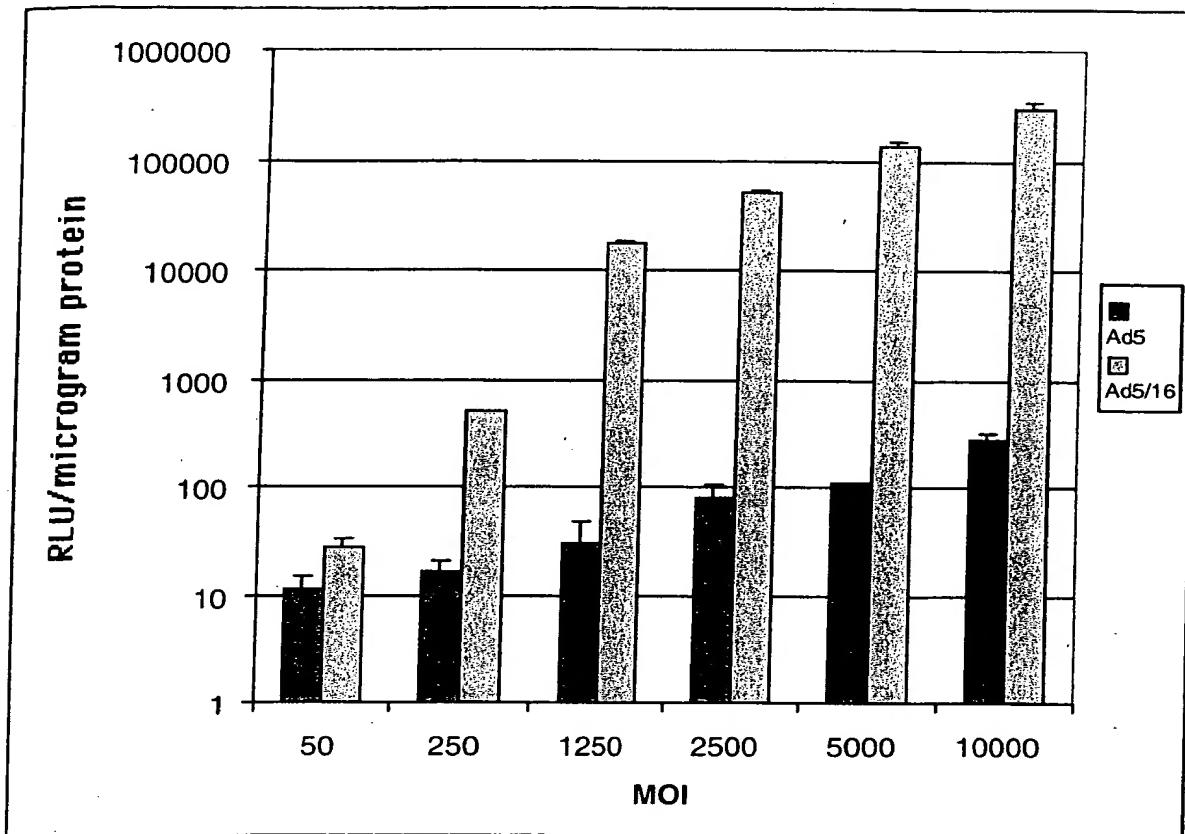
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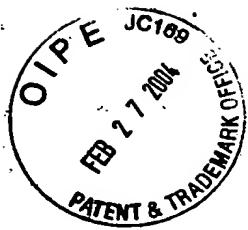
### Annotated Sheet Showing Changes

~~F 18~~ 8



① Rotate + Enlarge + remove border

② add Centered "Figure 8"



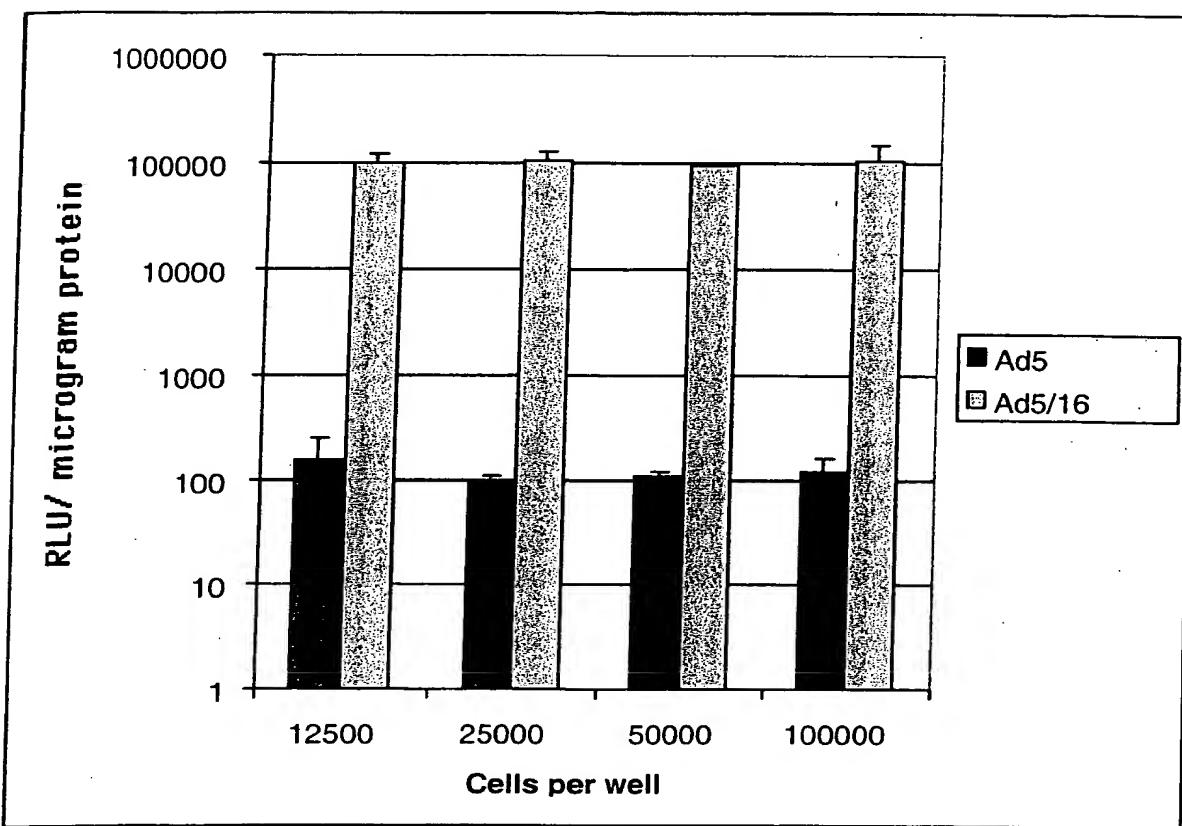
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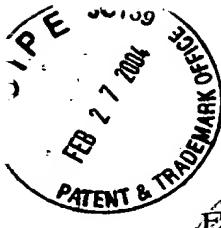
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- ① Rotate + enlarge + remove border
- ② add centered "Figure 9"



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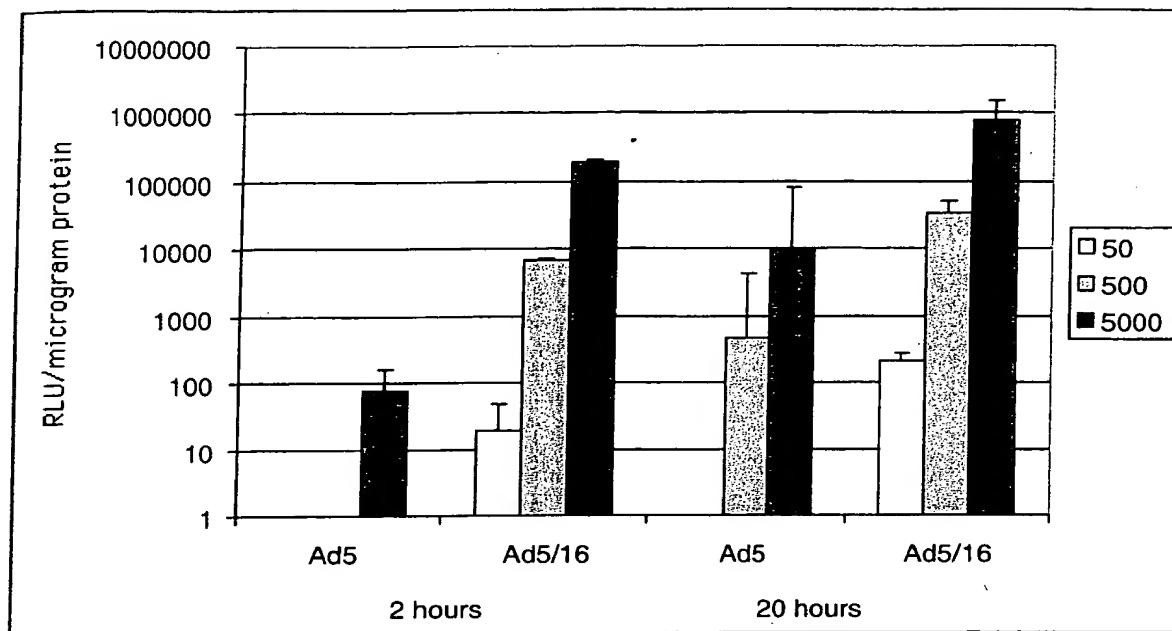
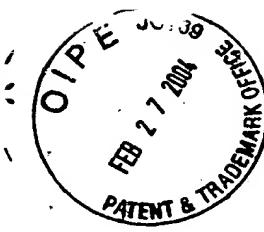


FIGURE 10

- ① Rotate + Enlarge + remove border
- ② add centered "Figure 10"



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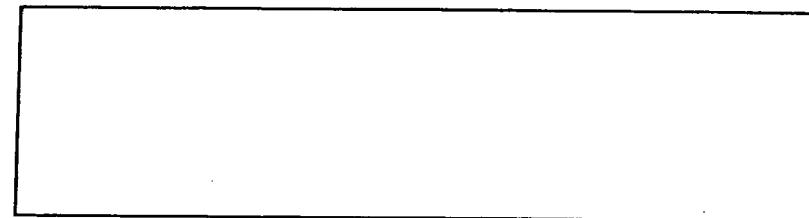
Synoviocytes infected with Ad.TK

FIGURE 11

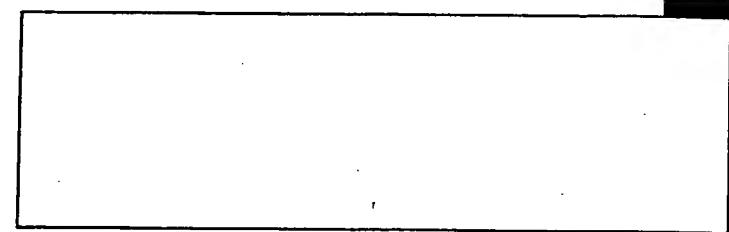
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remove border

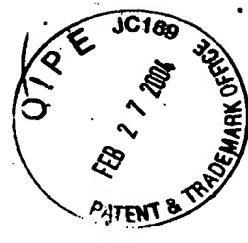
reduce



|G.Ad.CMV.TK



|G.Ad.MLPI.TK



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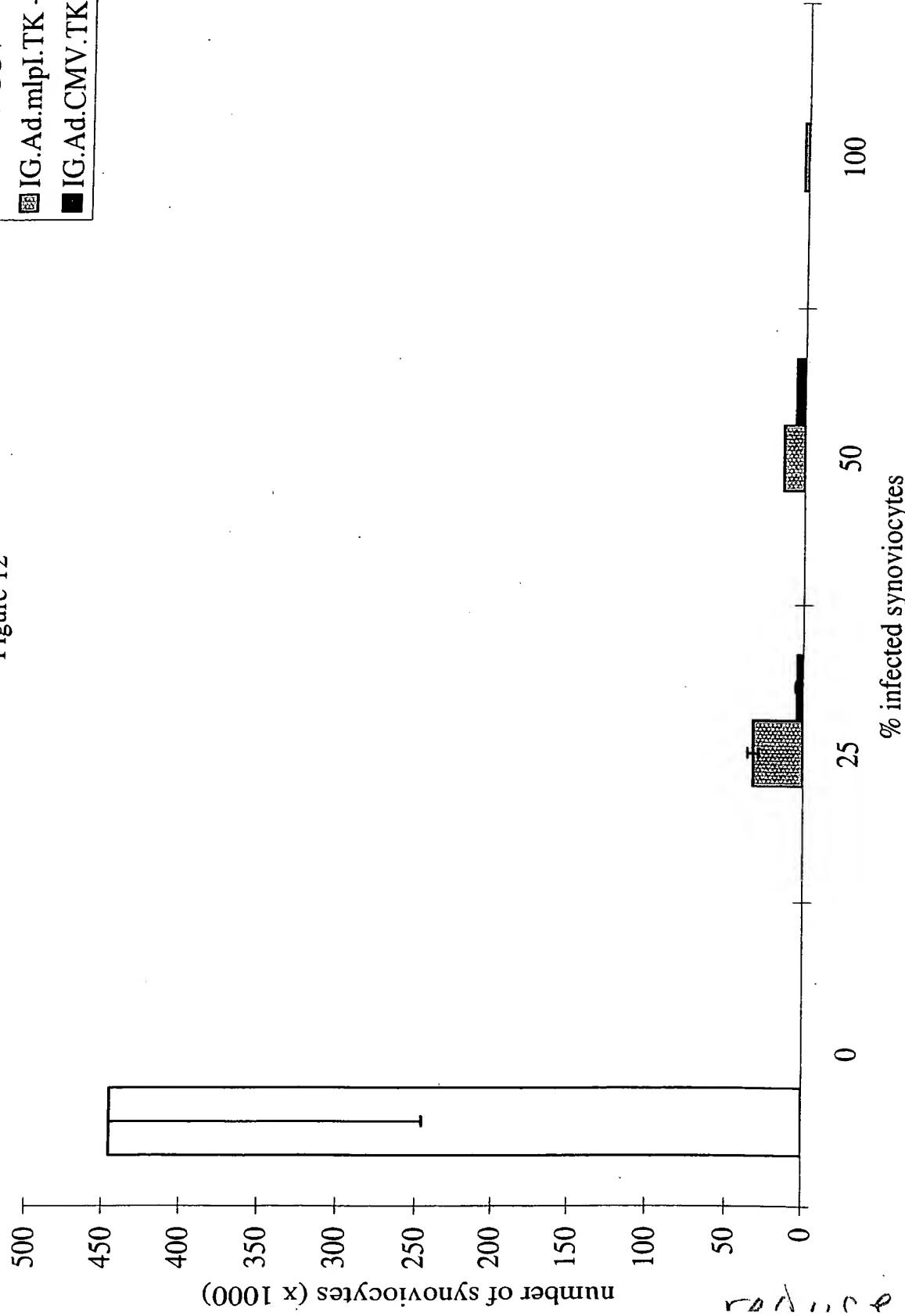
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- mock + GCV
- IG.Ad.mplI.TK + GCV
- IG.Ad.CMV.TK + GCV

Figure 12



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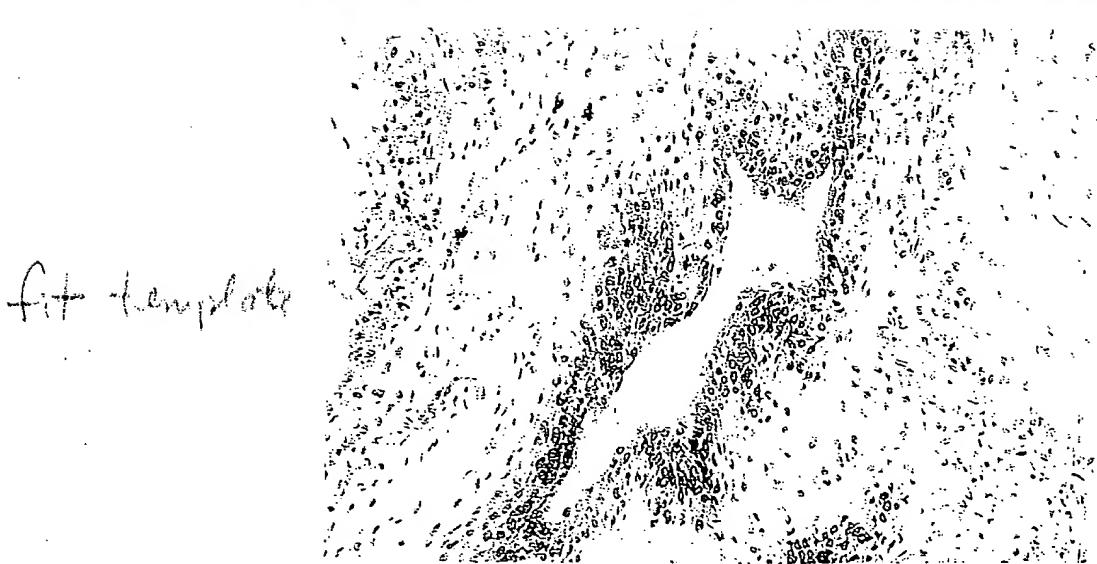
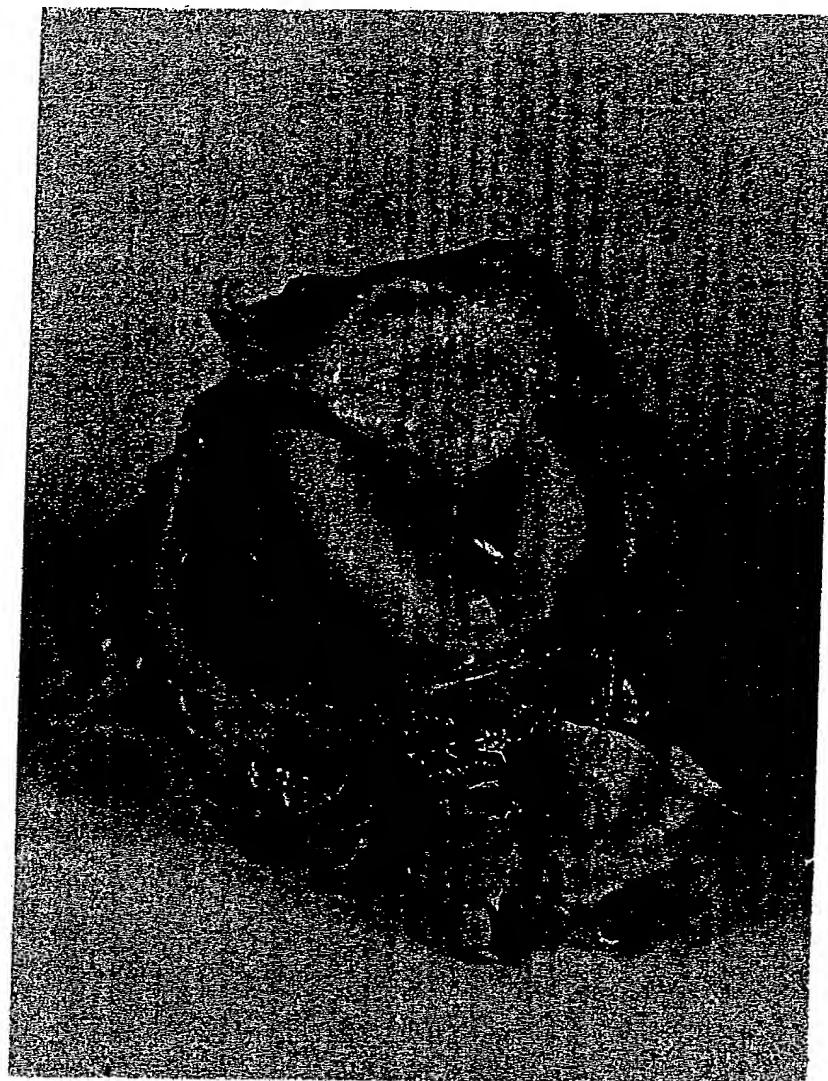
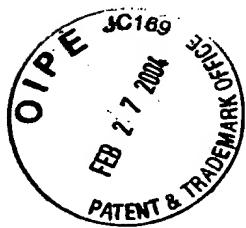
Inventor: Vogels et al.

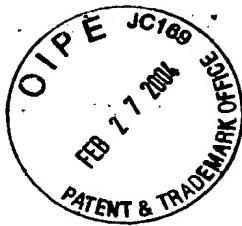
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FIGURE 13A





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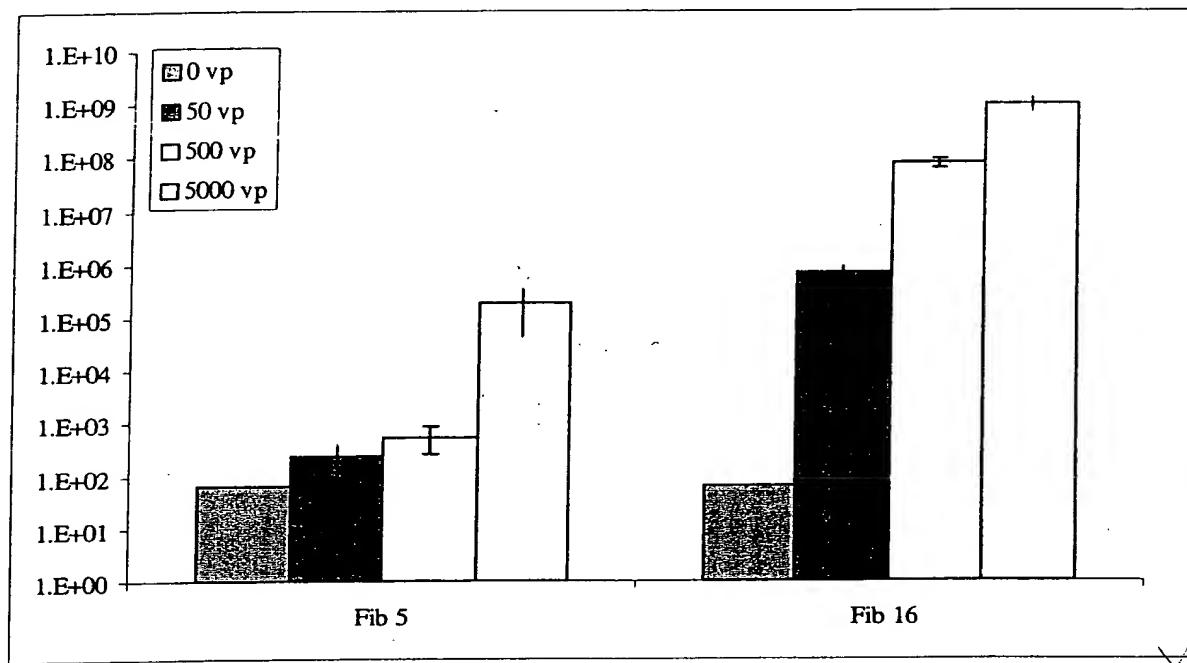
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Figure 14 | Comparison of infection of Ad5.luc and Ad5.fib16.luc on RA synoviocytes



Figures 14

- ① Enlarge + Rotate + Remove Border & Fig. legn
- ② add centered "FIGURE 14"

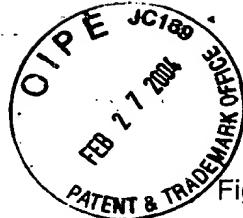


Figure 15

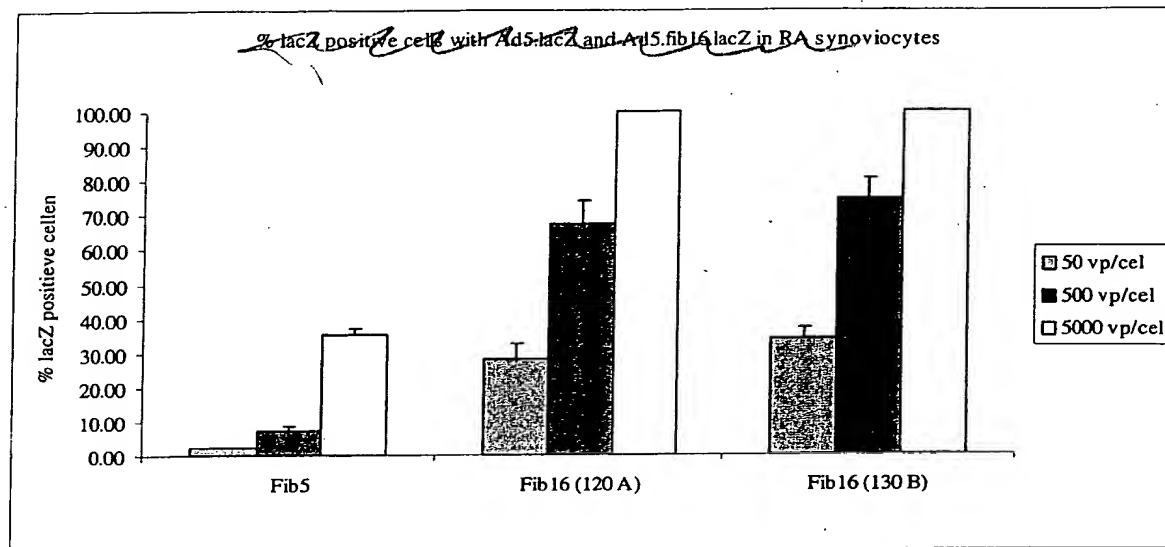
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- ① Enlarge + Rotate + Remove Border & Fig. legend
- ② add centered "FIGURE 15"



TITLE: MEANS AND METHODS FOR FIBROBLAST-LIKE OR MACROPHAGE-LIKE CELL TRANSDUCTION

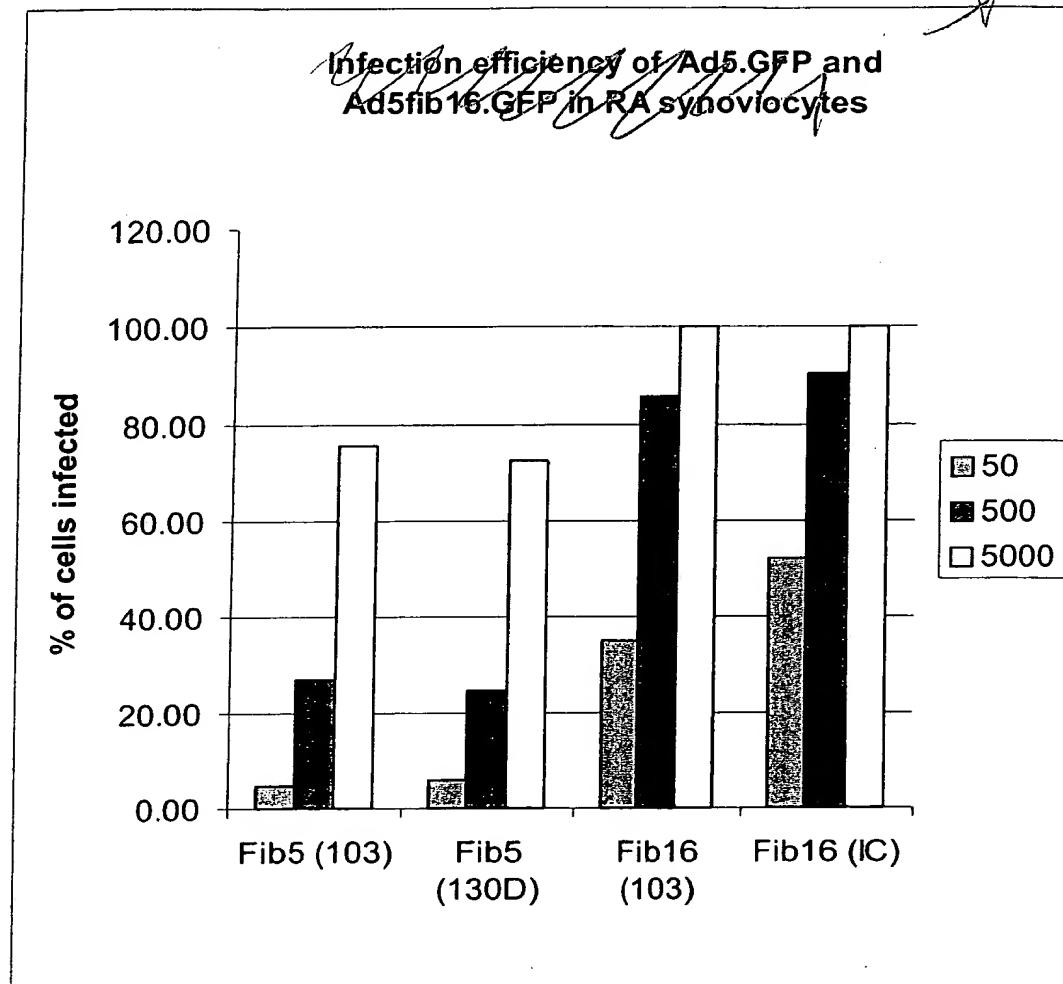
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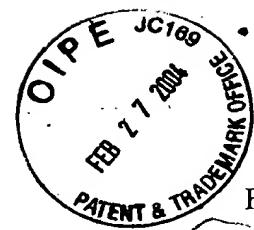
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Figure 16A



- ① Enlarge + Rotate + Remove Border ? Fig. legend
- ② add centered "FIGURE 16A"



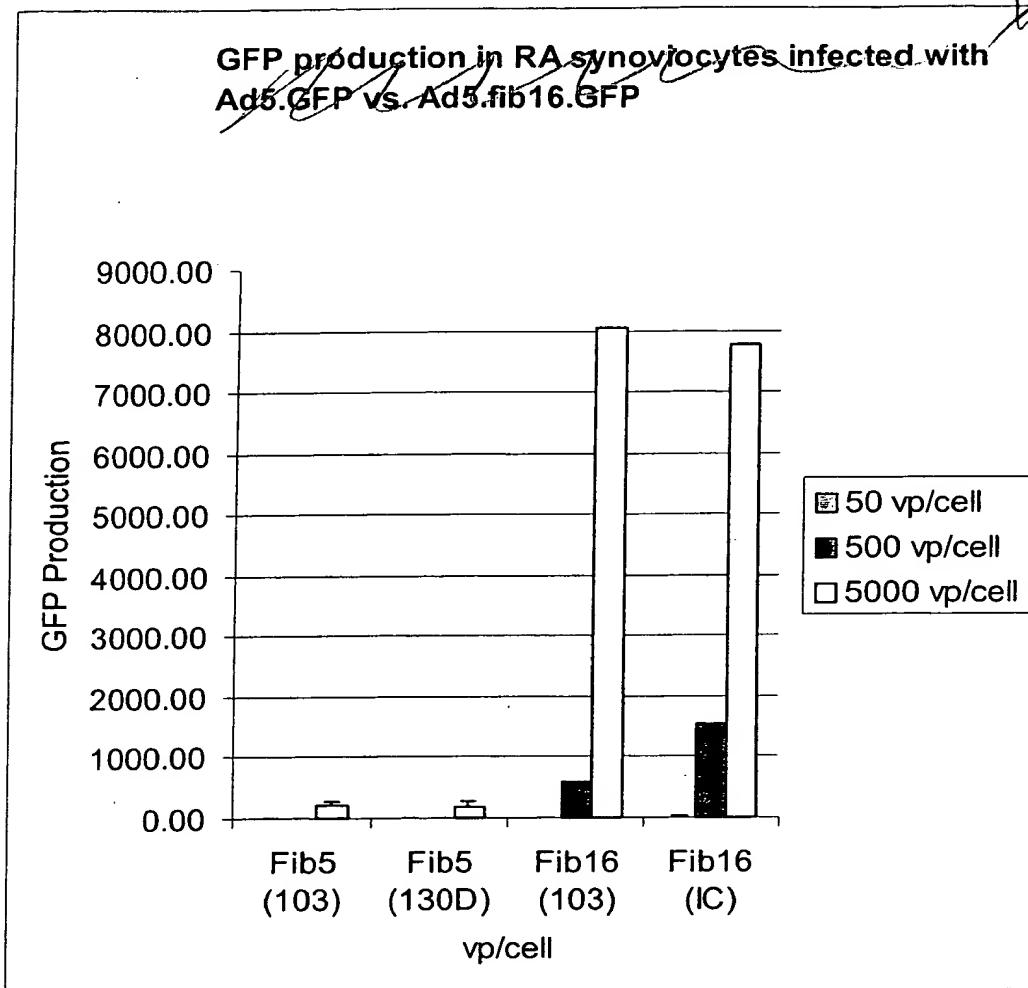
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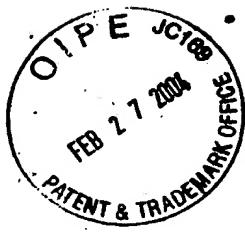
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- ① Enlarge + Rotate + Remove Brdley : Fig. legend
- ② add centered "FIGURE 16B"



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Figure 17: infectivity of panel of chimeric adenoviruses on RA synoviocytes

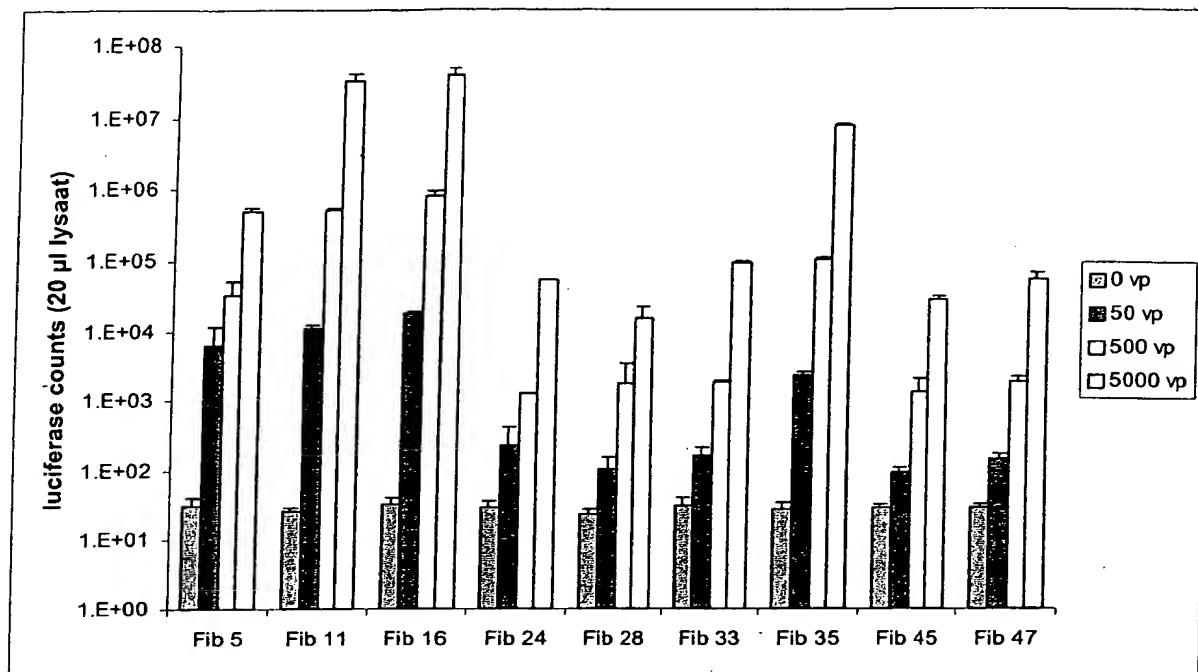


Figure 17

- ① Enlarge + Rotate + Remove Border & Fig. legend
- ② add centered "FIGURE 17"

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169  
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Figure 18A

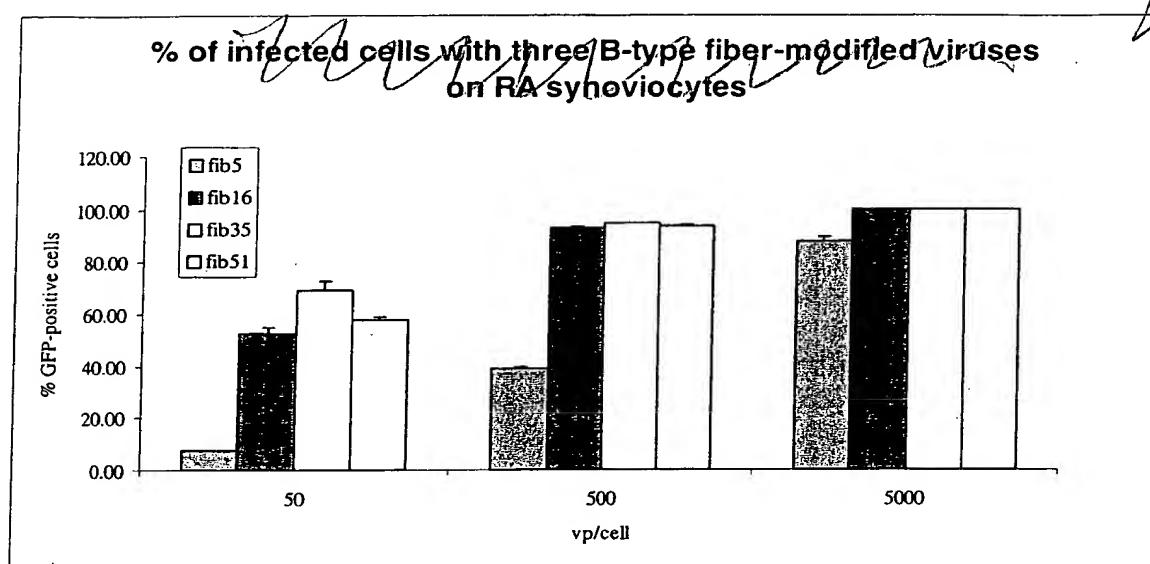
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- ① Enlarge + Rotate + Remove Border & Fig. legend
- ② add centered "FIGURE 18A"

O I P E  
FEB 21 2004  
PATENT & TRADEMARK OFFICE

TITLE: MEANS AND METHODS FOR FIBROBLAST-LIKE OR MACROPHAGE-LIKE CELL TRANSDUCTION

Inventor: Vogels et al.

Serial No.: 09/517,898 Docket No.: 2578-3982.2US

3 12 Amdt. Dated February 23, 2004

### Annotated Sheet Showing Changes

Figure 18B: GFP production with three B-type fiber-modified viruses on RA synoviocytes

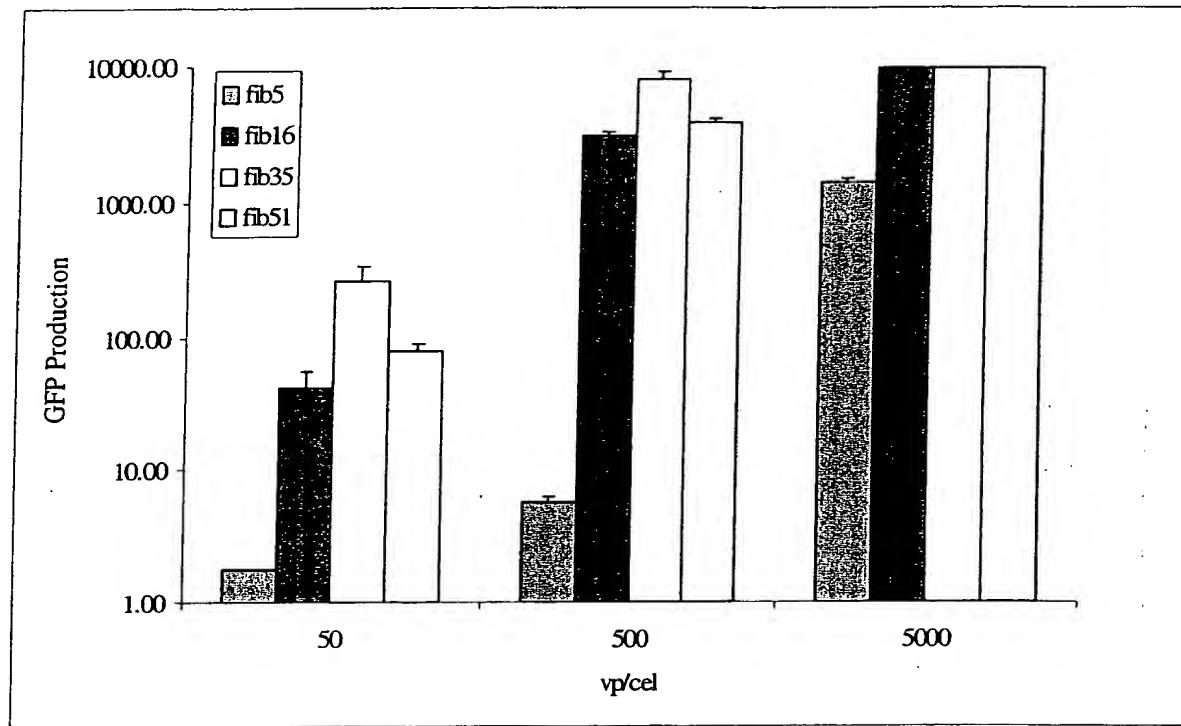
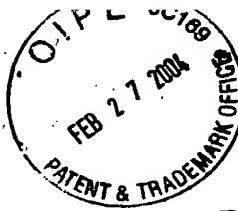


Fig 18B

- ① Enlarge + Rotate + Remove Border & Fig. legend
- ② add centered "FIGURE 18B"



TITLE: MEANS AND METHODS FOR FIBROBLAST-LIKE OR MACROPHAGE-LIKE CELL TRANSDUCTION

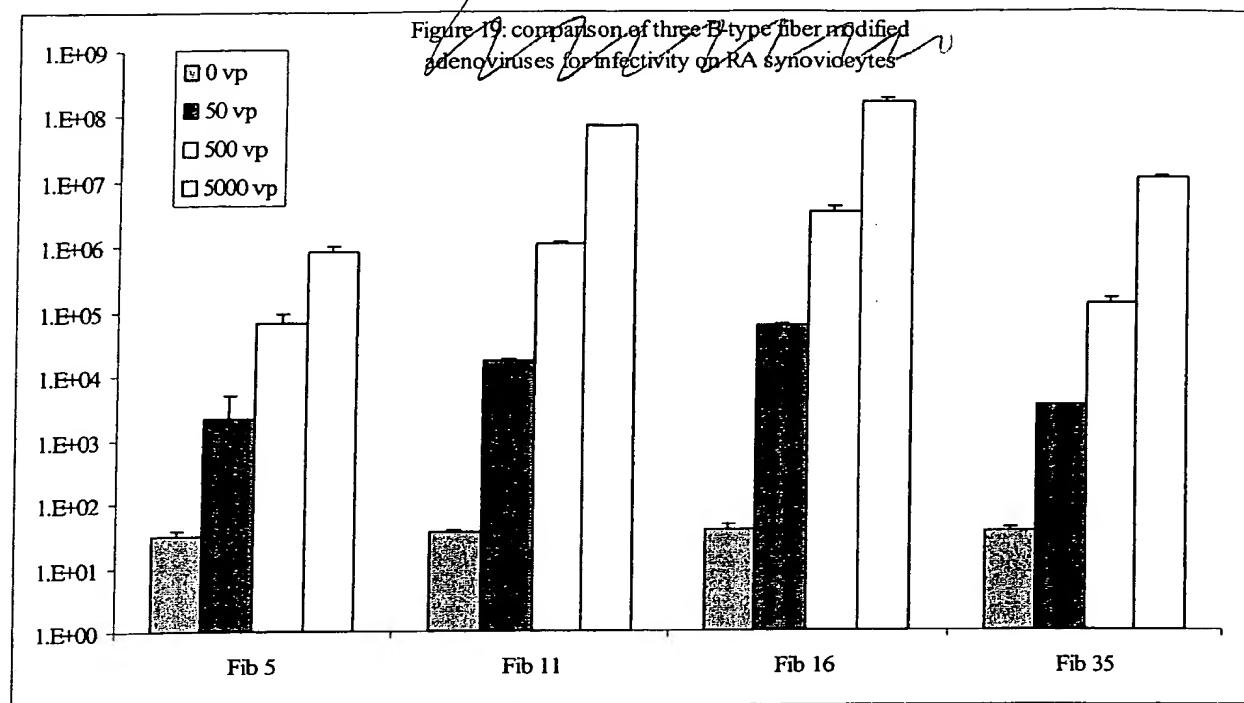
Inventor: Vogels et al.

Serial No.: 09/517,898 Docket No.: 2578-3982.2US

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Figure 19



① Enlarge + Rotate + Remove Border & Fig. legend  
② add centered "FIGURE 19"



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Figure 20: comparison of infectivity Ad5.lacZ vs. Ad5.fib16.lacZ in RA synoviocytes from

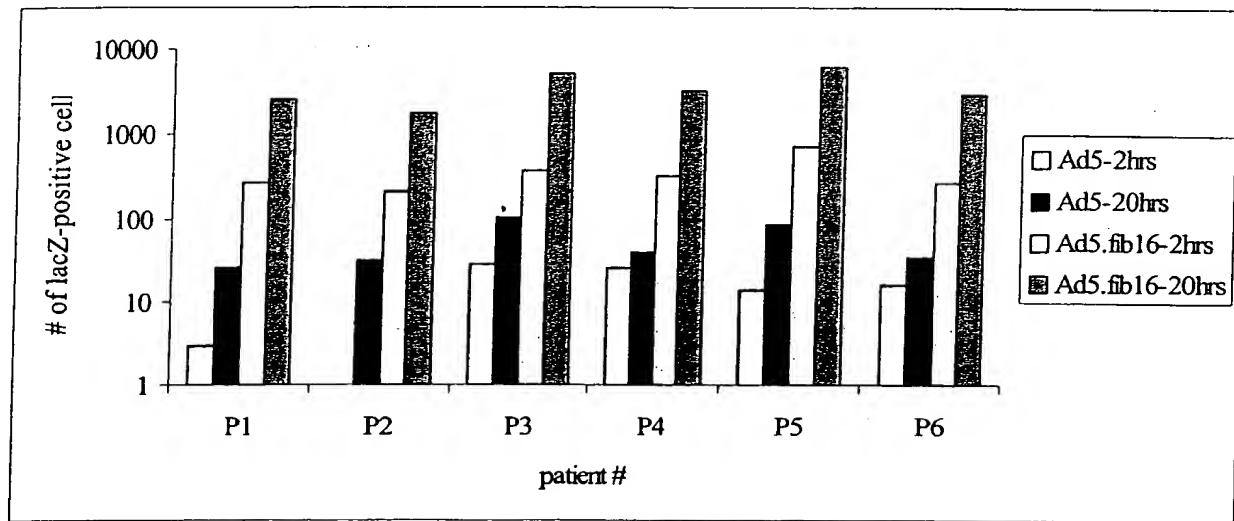


FIGURE 20

- ① Enlarge + Rotate + Remove Boxes & Fig. legend
- ② add centered "FIGURE 20"